

CLAIMS

We claim:

- 1 1. A lubricating system affixed to and rotating with a
2 rotary shaft having a plurality of lubricated bearings, the
3 lubricating system comprising:
 - 4 a first bracket portion;
 - 5 a second bracket portion diametrically opposite said first
6 bracket portion, and coplanar therewith;
 - 7 a third bracket portion, axially spaced apart from said
8 first bracket portion and parallel thereto;
 - 9 a fourth bracket portion diametrically opposite said third
10 bracket portion, and coplanar therewith;
 - 11 each said bracket portion having a semicircular
12 configuration with a first end, a second end opposite said first
13 end, an inner diameter adapted for mounting on the rotary shaft,
14 and an outer diameter larger than said inner diameter;
 - 15 each said bracket portion further including at least one
16 automatic lubricator passage disposed therethrough, between said
17 inner diameter and said outer diameter;
 - 18 an automatic lubricator disposed within each said automatic
19 lubricator passage;

20 a lubrication line extending from each said automatic
21 lubricator to each of the rotary shaft bearings;

22 a plurality of bracket portion spacer fittings for securing
23 together and spacing apart said first and said third bracket
24 portion from one another, and for securing together and spacing
25 apart said second and said fourth bracket portion from one
26 another; and

27 a plurality of bracket portion clamp fittings for securing
28 said first and said second bracket portion together and for
29 securing said second and said fourth bracket portion together,
30 and clamping the rotary shaft immovably within and relative to
31 said first through said fourth bracket portion.

1 2. The lubricating system according to claim 1, wherein
2 said plurality of bracket portion spacer fittings comprises:
3 at least one medial spacer disposed between said first and
4 said third bracket portion and between said second and said
5 fourth bracket portion;
6 each said medial spacer further including a threaded axial
7 passage formed concentrically therethrough;
8 each said bracket portion further including at least one
9 medial spacer attachment passage therethrough; and
10 a plurality of bracket assembly bolts securing each said
11 bracket portion to each said medial spacer.

1 3. The lubricating system according to claim 1, wherein
2 said plurality of bracket portion clamp fittings comprises:

3 at least one first end spacer disposed between said first
4 and said third bracket portion and between said second and said
5 fourth bracket portion;

6 at least one second end spacer disposed between said first
7 and said third bracket portion and between said second and said
8 fourth bracket portion;

9 each said first end spacer and each said second end spacer
10 further including a threaded axial passage formed concentrically
11 therethrough and a passage formed diametrically therethrough;

12 each said end of each said bracket portion further
13 including at least one spacer attachment passage formed
14 therethrough;

15 a plurality of bracket assembly bolts securing each said
16 bracket portion to each said first end and second end spacer;

17 a plurality of bracket first end clamping bolts disposed
18 diametrically through each said first end spacer;

19 a plurality of bracket second end clamping bolts disposed
20 diametrically through each said second end spacer; and

21 each of said bolts having a head end and a nut secured
22 opposite said head end and clamping corresponding said first end
23 and said second end spacers therebetween, thereby clamping said

24 first through said fourth bracket portion about the rotary
25 shaft.

1 4. The lubricating system according to claim 1, further
2 including a grommet disposed within each said automatic
3 lubricator passage.

1 5. The lubricating system according to claim 1, wherein
2 each said bracket portion further includes:

3 a plurality of lubrication line clearance passages formed
4 therethrough;

5 a plurality of lubrication line anchor passages formed
6 therethrough; and

7 each of said lubrication line anchor passages further
8 including a bulkhead fitting installed therein.

1 6. The lubricating system according to claim 1, wherein
2 each said automatic lubricator is controlled by an internal
3 timer.

1 7. The lubricating system according to claim 1, wherein
2 each said automatic lubricator is controlled by an internal
3 receiver receiving signals from an external transmitter.

1 8. The lubricating system according to claim 1, wherein
2 each said bracket portion is formed of aluminum.

1 9. A rotating shaft having a plurality of lubricated
2 bearings thereon and a lubricating system affixed thereto and
3 rotating therewith, comprising in combination:
4 a rotating drive shaft having a first bearing end and a
5 second bearing end opposite said first bearing end;
6 a first plurality of rotating bearings disposed at said
7 first bearing end;
8 a second plurality of rotating bearings disposed at said
9 second bearing end;
10 a first bracket portion;
11 a second bracket portion opposite said first bracket
12 portion, and coplanar therewith;
13 a third bracket portion, spaced apart from said first
14 bracket portion and parallel thereto;
15 a fourth bracket portion opposite said third bracket
16 portion, and coplanar therewith;
17 each said bracket portion having a semicircular
18 configuration with a first end, a second end opposite said first
19 end, an inner diameter essentially equal to the diameter of the
20 rotary shaft, and an outer diameter larger than said inner
21 diameter;

22 each said bracket portion further including at least one
23 automatic lubricator passage disposed therethrough, between said
24 inner diameter and said outer diameter;

25 an automatic lubricator disposed within each said automatic
26 lubricator passage;

27 a lubrication line extending from each said automatic
28 lubricator to each of said rotating bearings;

29 a plurality of bracket portion spacer fittings for securing
30 together and spacing apart said first and said third bracket
31 portion from one another, and for securing together and spacing
32 apart said second and said fourth bracket portion from one
33 another; and

34 a plurality of bracket portion clamp fittings for securing
35 said first and said second bracket portion together and for
36 securing said second and said fourth bracket portion together,
37 and clamping said rotating drive shaft immovably within and
38 relative to said first through said fourth bracket portion.

1 10. The rotating shaft and lubricating system combination
2 according to claim 9, wherein said plurality of bracket portion
3 spacer fittings comprises:

4 at least one medial spacer disposed between said first and
5 said third bracket portion and between said second and said
6 fourth bracket portion;

7 each said medial spacer further including a threaded axial
8 passage formed concentrically therethrough;

9 each said bracket portion further including at least one
10 medial spacer attachment passage therethrough; and

11 a plurality of bracket assembly bolts securing each said
12 bracket portion to each said medial spacer.

1 11. The rotating shaft and lubricating system combination
2 according to claim 9, wherein said plurality of bracket portion
3 clamp fittings comprises:

4 at least one first end spacer disposed between said first
5 and said third bracket portion and between said second and said
6 fourth bracket portion;

7 at least one second end spacer disposed between said first
8 and said third bracket portion and between said second and said
9 fourth bracket portion;

10 each said first end spacer and each said second end spacer
11 further including a threaded axial passage formed concentrically
12 therethrough and a passage formed diametrically therethrough;

13 each said end of each said bracket portion further
14 including at least one spacer attachment passage formed
15 therethrough;

16 a plurality of bracket assembly bolts securing each said
17 bracket portion to each said first end and second end spacer;

18 a plurality of bracket first end clamping bolts disposed
19 diametrically through each said first end spacer;

20 a plurality of bracket second end clamping bolts disposed
21 diametrically through each said second end spacer; and

22 each of said bolts having a head end and a nut secured
23 opposite said head end and clamping corresponding said first end

24 and said second end spacers therebetween, thereby clamping said
25 first through said fourth bracket portion about the rotary
26 shaft.

1 12. The rotating shaft and lubricating system combination
2 according to claim 9, further including a grommet disposed
3 within each said automatic lubricator passage.

1 13. The rotating shaft and lubricating system combination
2 according to claim 9, wherein each said bracket portion further
3 includes:

4 a plurality of lubrication line clearance passages formed
5 therethrough;

6 a plurality of lubrication line anchor passages formed
7 therethrough; and

8 each of said lubrication line anchor passages further
9 including a bulkhead fitting installed therein.

1 14. The rotating shaft and lubricating system combination
2 according to claim 9, wherein each said automatic lubricator is
3 controlled by an internal timer.

1 15. The rotating shaft and lubricating system combination
2 according to claim 9, wherein each said automatic lubricator is
3 controlled by an internal receiver receiving signals from an
4 external transmitter.

5 16. The rotating shaft and lubricating system combination
6 according to claim 9, wherein each said bracket portion is
7 formed of aluminum.

1 17. The rotating shaft and lubricating system combination
2 according to claim 9, wherein said first and said second
3 plurality of rotating bearings disposed respectively at said
4 first and said second bearing end of said rotating drive shaft,
5 each comprise a plurality of universal joint trunnion bearings.